MARYLAND
Department of Health

Public Health Preparedness and Situational Awareness Report: #2019:01

Reporting for the week ending 01/05/19 (MMWR Week #01)

January 11, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS
National: **No Active Alerts**
Maryland: **Normal (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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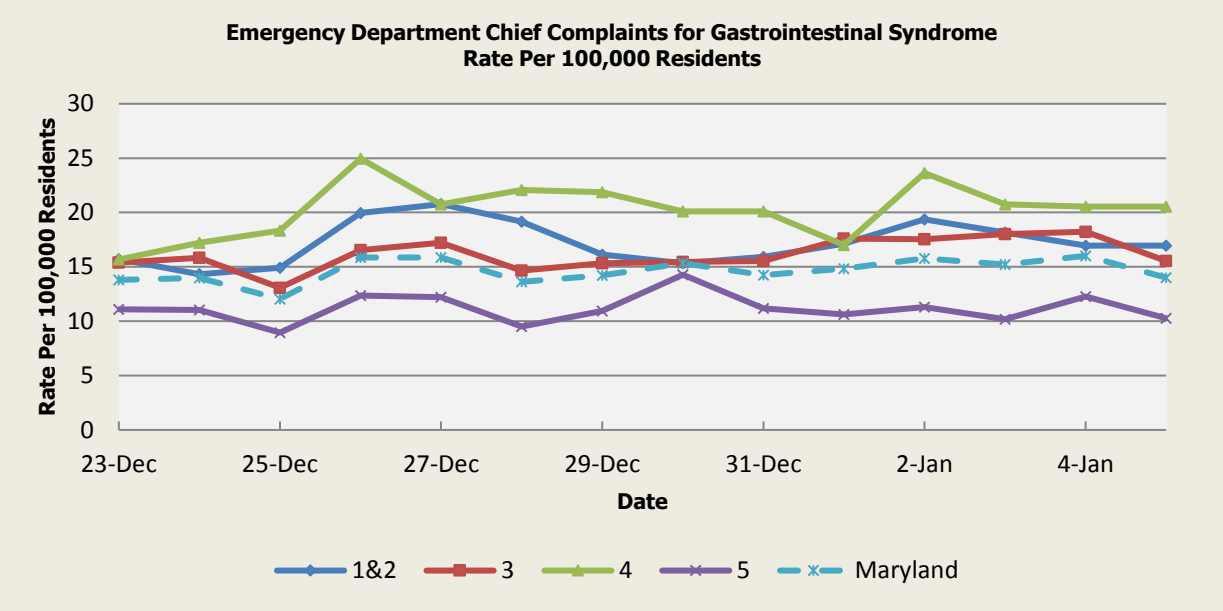
Gastrointestinal Syndrome



There were four (4) Gastrointestinal Syndrome outbreaks reported this week: three (3) outbreaks of Gastroenteritis in Nursing Homes (Regions 3,5); one (1) outbreak of Gastroenteritis in an Assisted Living Facility (Region 4).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.11	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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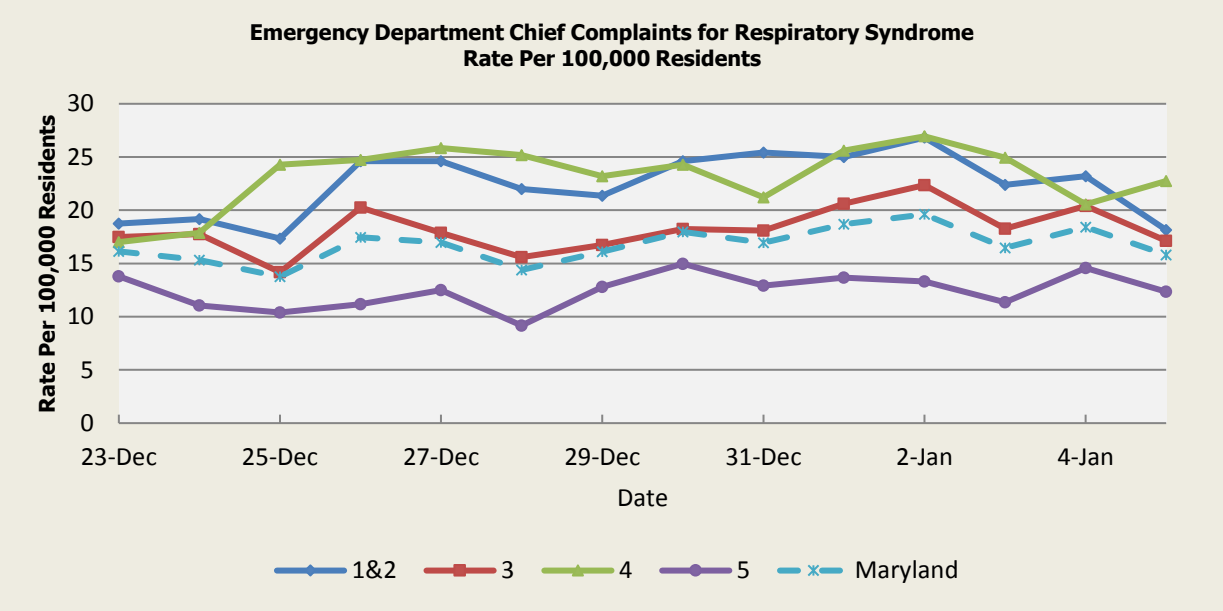
Respiratory Syndrome



There were three (3) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Influenza/Pneumonia in a Nursing Home (Region 3); one (1) outbreak of ILI associated with a Daycare Center (Region 4); one (1) outbreak of Pneumonia in a Nursing Home (Region 5).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.48	14.61	14.87	9.90	12.65
Median Rate*	12.10	14.07	14.13	9.52	12.16

** Per 100,000 Residents*

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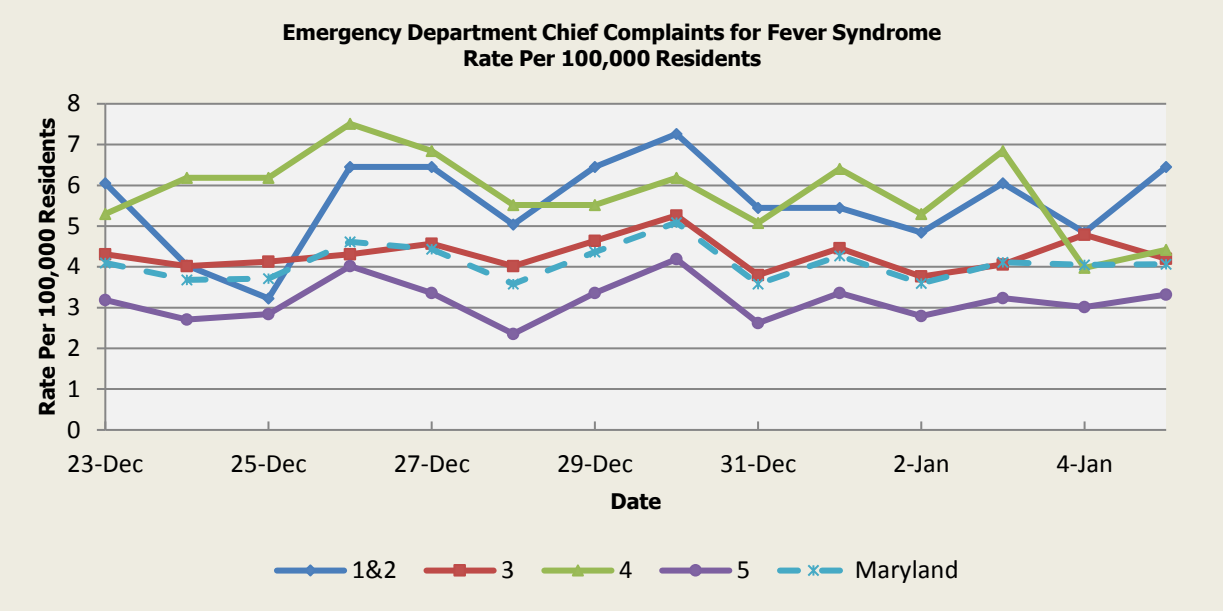
Fever Syndrome



There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.02	3.87	4.03	3.02	3.49
Median Rate*	2.82	3.76	3.86	2.92	3.36

**Per 100,000 Residents*

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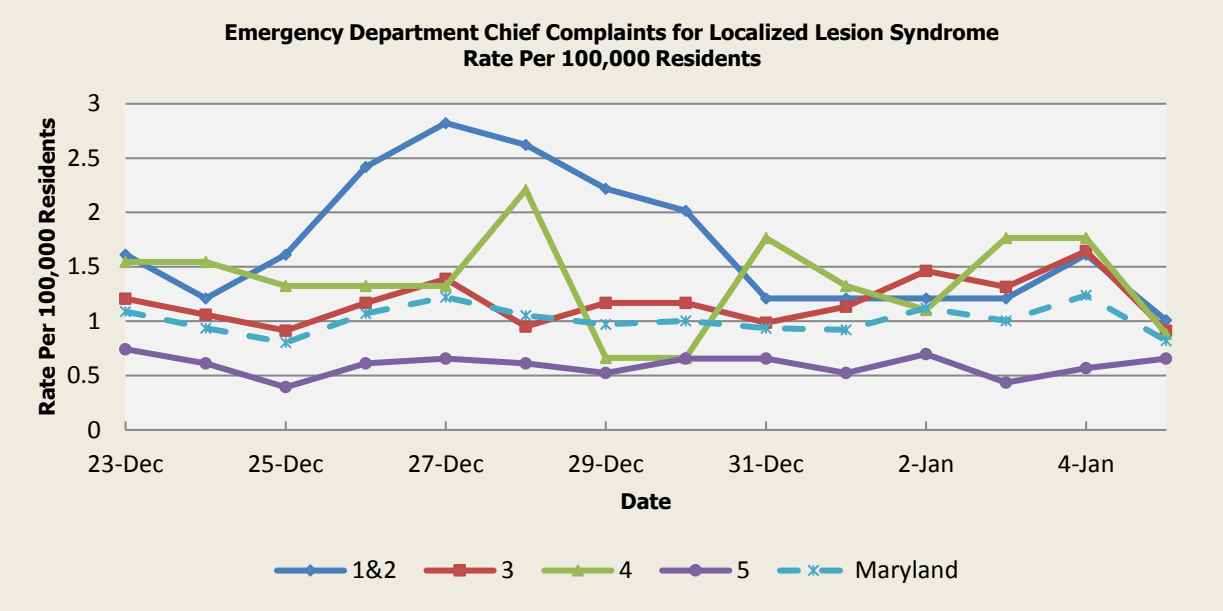
Localized Lesion Syndrome



There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.09	1.82	2.05	0.92	1.43
Median Rate*	1.01	1.75	1.99	0.87	1.37

** Per 100,000 Residents*

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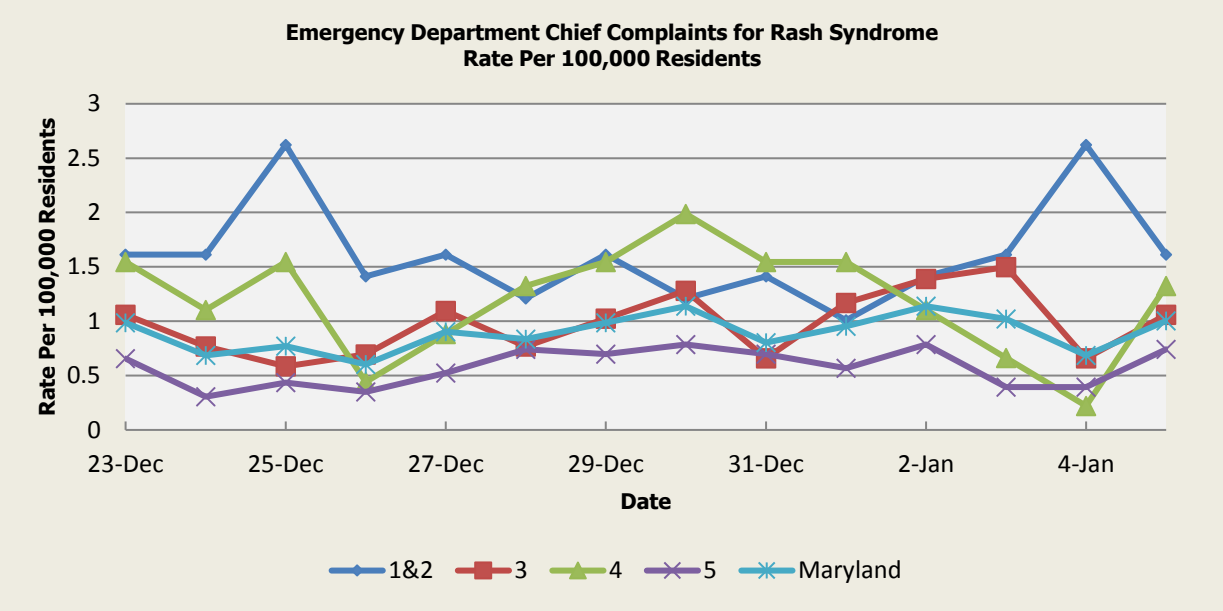
Rash Syndrome



There were no Rash Syndrome outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.70	1.77	0.99	1.39
Median Rate*	1.21	1.61	1.77	0.96	1.34

** Per 100,000 Residents*

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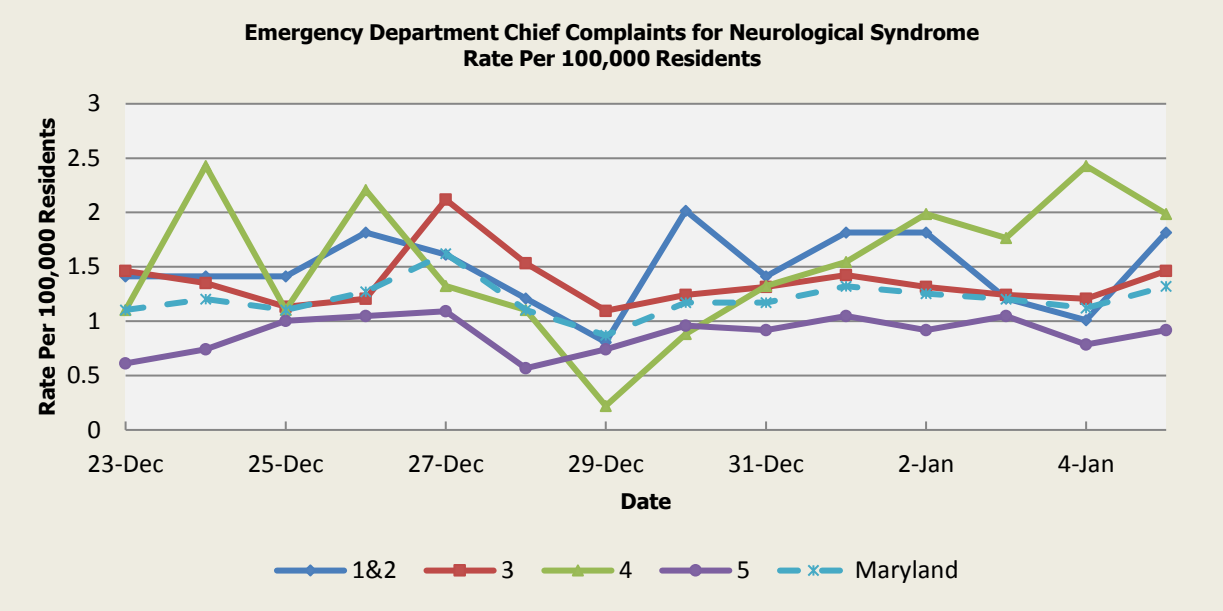
Neurological Syndrome



There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.74	0.91	0.82	0.57	0.76
Median Rate*	0.60	0.80	0.66	0.52	0.67

** Per 100,000 Residents*

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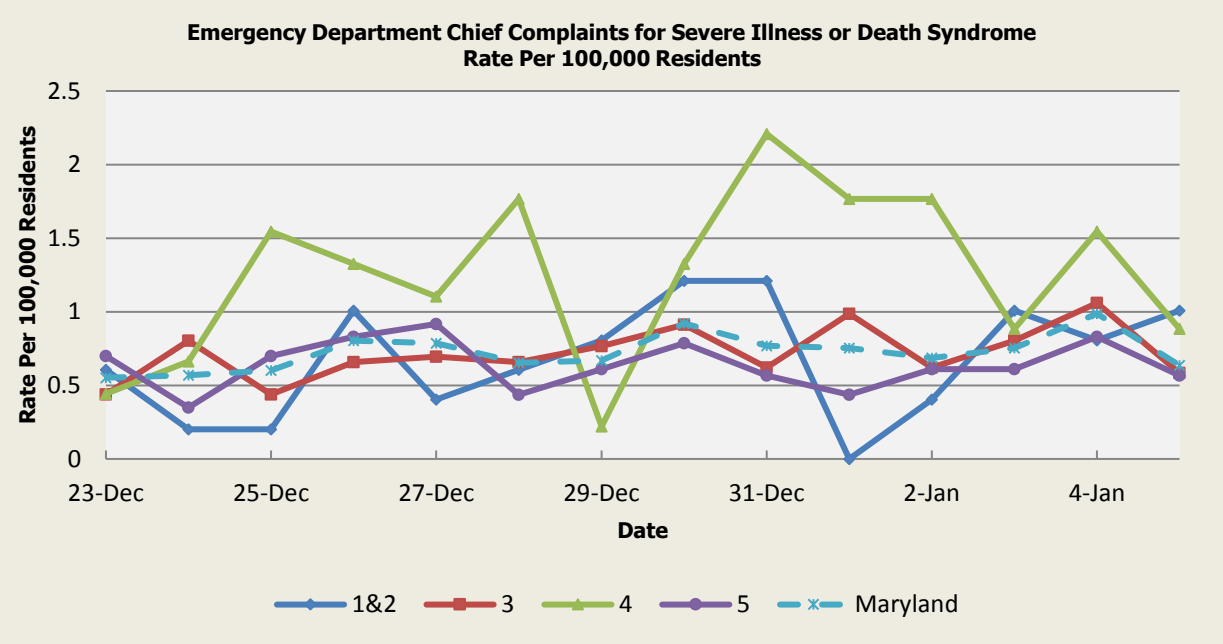
Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.91	0.83	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

** Per 100,000 Residents*

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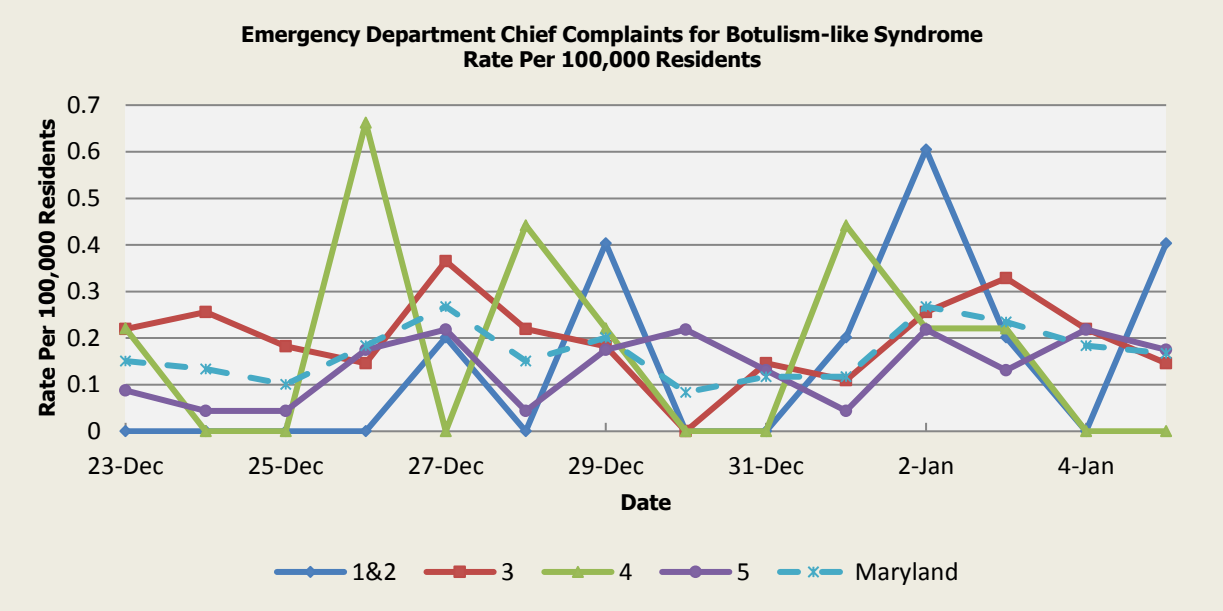
SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 12/23 (Region 4), 12/24 (Region 3), 12/26 (Regions 4,5), 12/27 (Regions 1&2,3,5), 12/28 (Region 4), 12/29 (Regions 1&2,4,5), 12/30 (Region 5), 01/01 (Regions 1&2,4), 01/02 (Regions 1&2,3,4,5), 01/03 (Regions 1&2,3,4), 01/04 (Region 5), 01/05 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.11	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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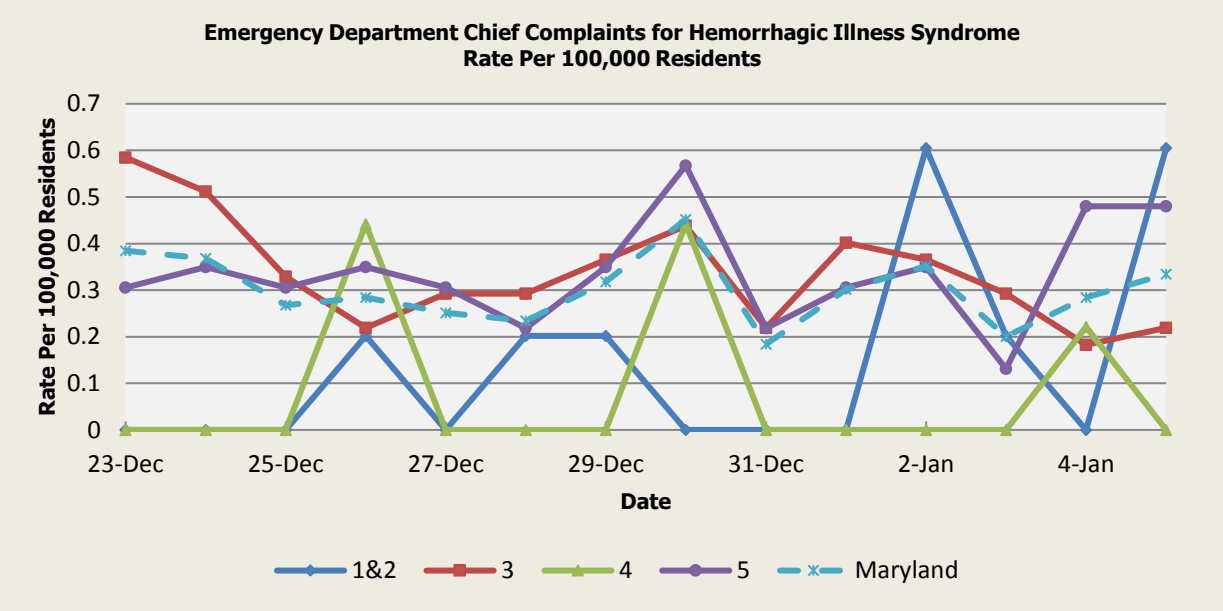
Hemorrhagic Illness Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 12/23 (Regions 3,5), 12/24 (Regions 3,5), 12/25 (Regions 3,5), 12/26 (Regions 1&2,4,5), 12/27 (Region 5), 12/28 (Regions 1&2), 12/29 (Regions 1&2,3,5), 12/30 (Regions 3,4,5), 01/01 (Regions 3,5), 01/02 (Regions 1&2,3,5), 01/03 (Regions 1&2), 01//04 (Regions 4,5), 01/05 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.15	0.03	0.12	0.12
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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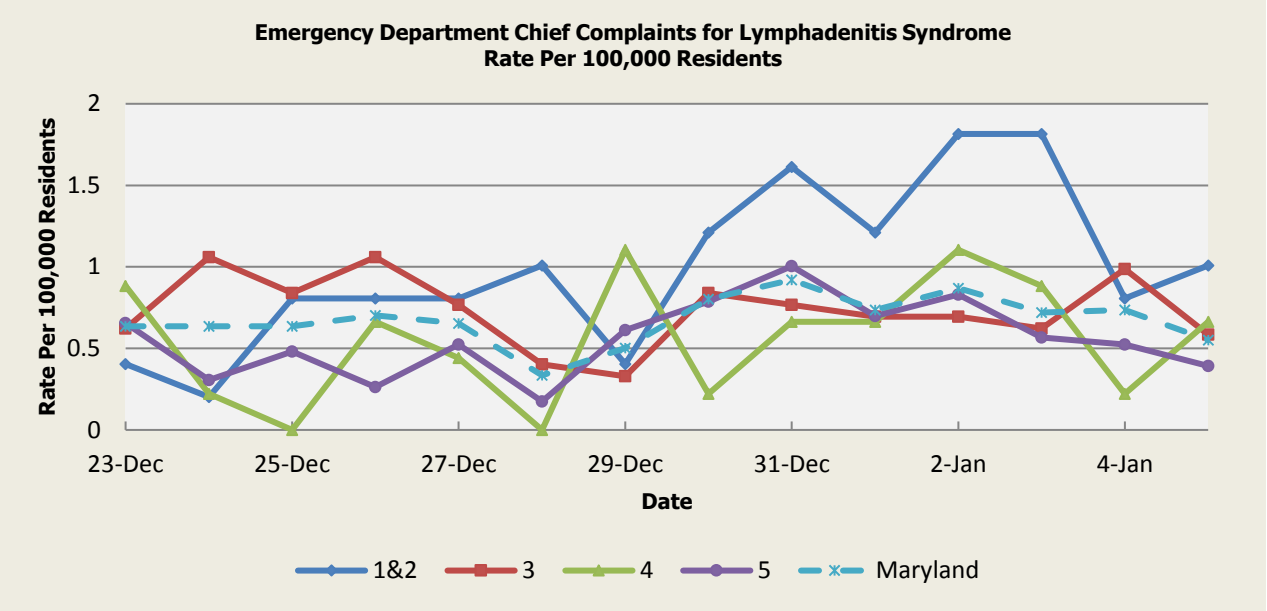
Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 12/23 (Region 4), 12/24 (Region 3), 12/25 (Regions 1&2), 12/26 (Regions 1&2,3), 12/27 (Regions 1&2), 12/28 (Regions 1&2), 12/29 (Region 4), 12/30 (Regions 1&2,5), 12/31 (Regions 1&2,5), 01/01 (Regions 1&2), 01/02 (Regions 1&2,4,5), 01/03 (Regions 1&2,4), 01/04 (Regions 1&2), 01/05 (Regions 1&2). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.34	0.57	0.39	0.36	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.38

** Per 100,000 Residents*

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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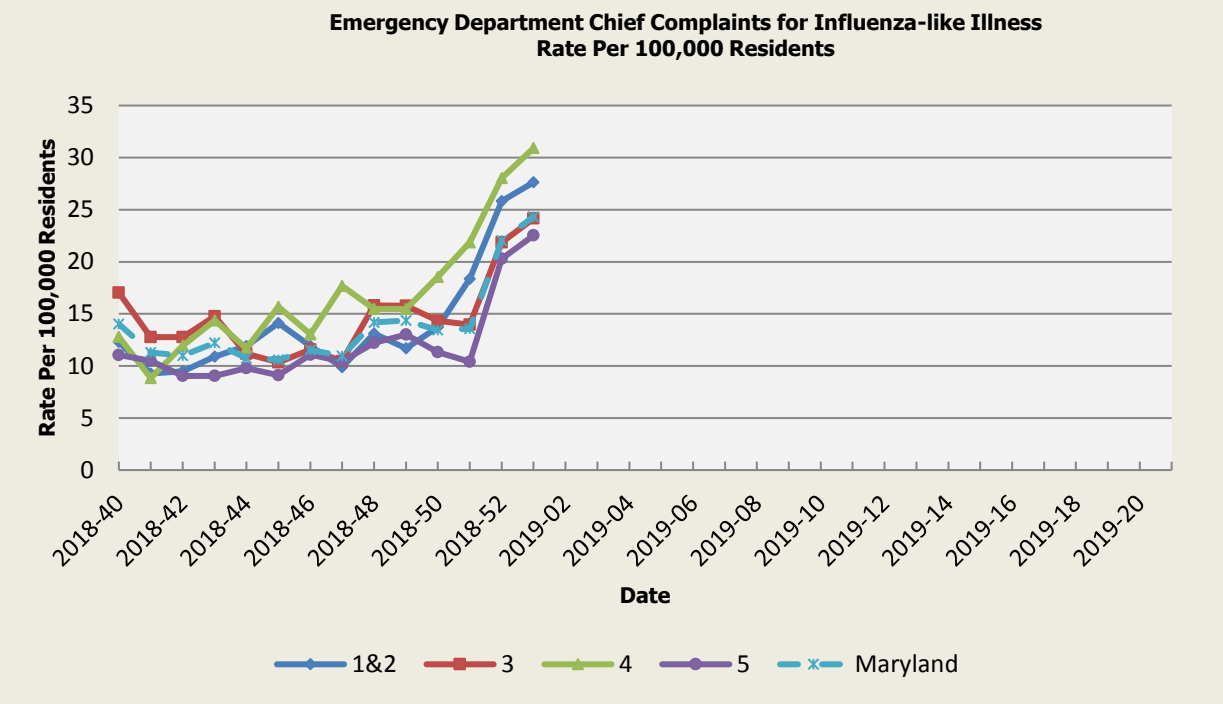
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 01 was: High Intensity.

Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.25	16.43	15.08	14.21	15.13
Median Rate*	7.66	9.65	9.05	8.45	8.99

** Per 100,000 Residents*

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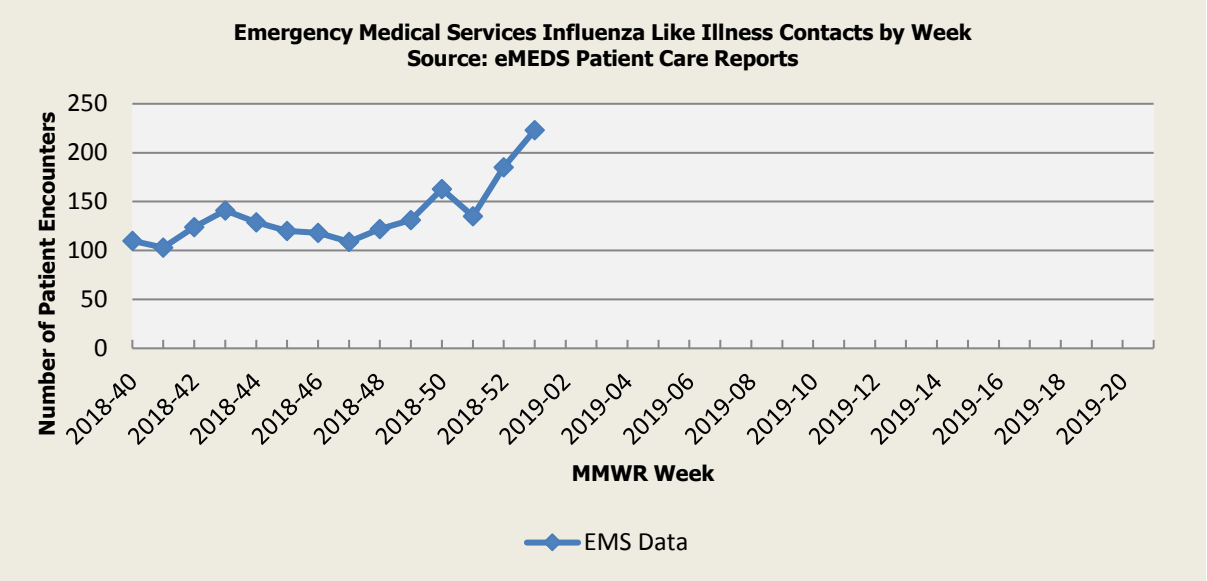
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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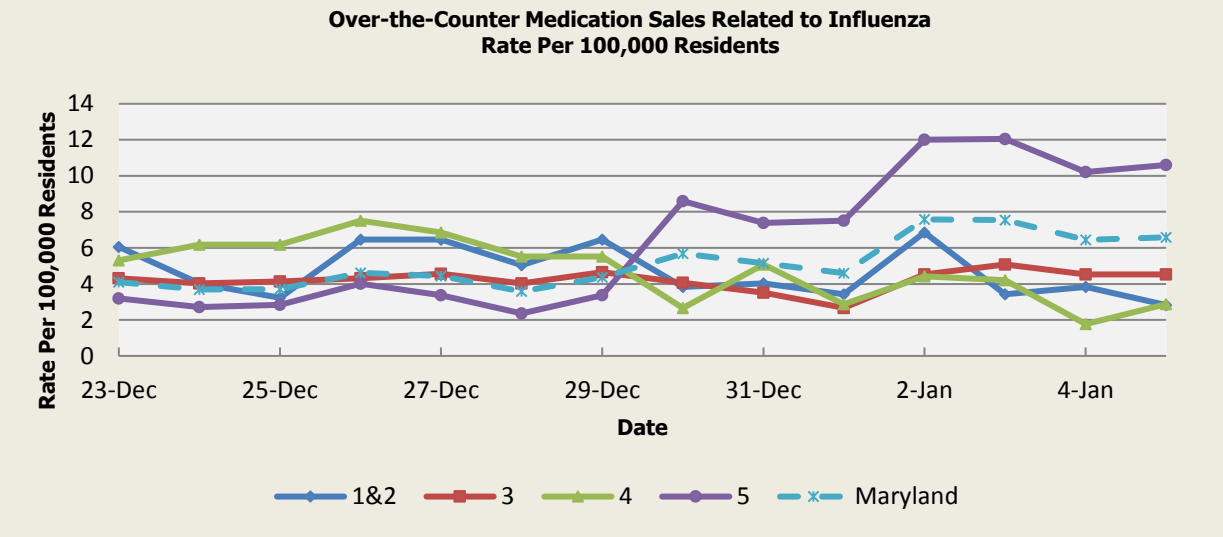
Over-the-Counter Influenza-Related Medication Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.62	4.69	2.75	8.09	5.76
Median Rate*	3.02	3.95	2.43	7.47	5.09

** Per 100,000 Residents*

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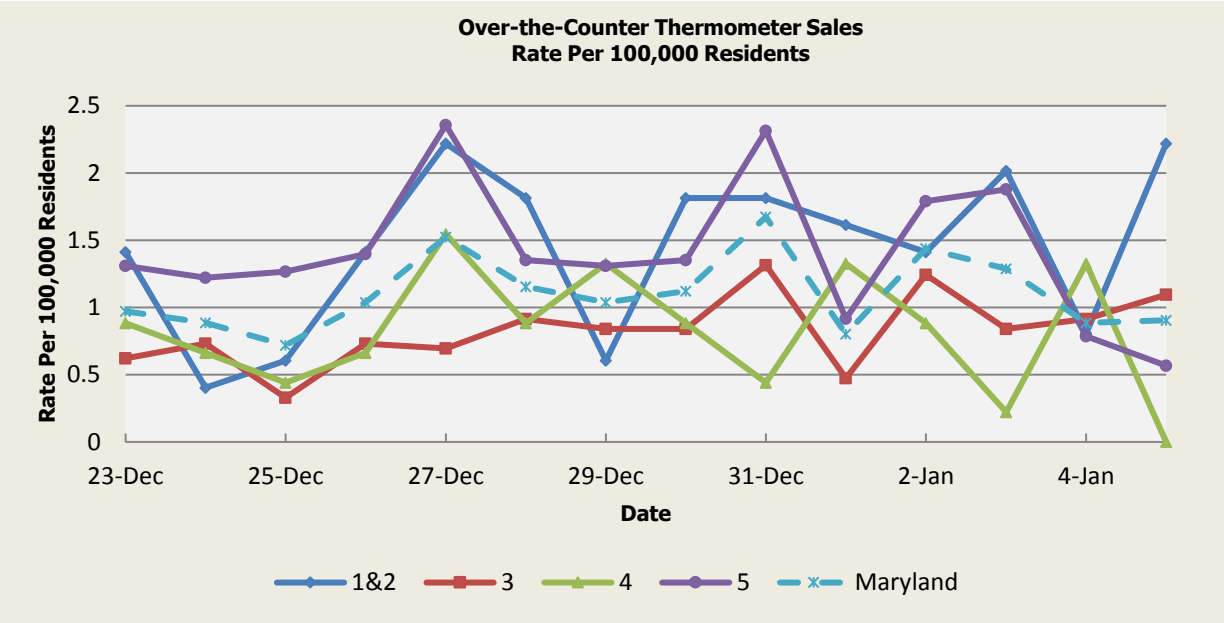
Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.13	2.99	2.36	3.98	3.33
Median Rate*	2.82	2.81	2.21	3.80	3.18

** Per 100,000 Residents*

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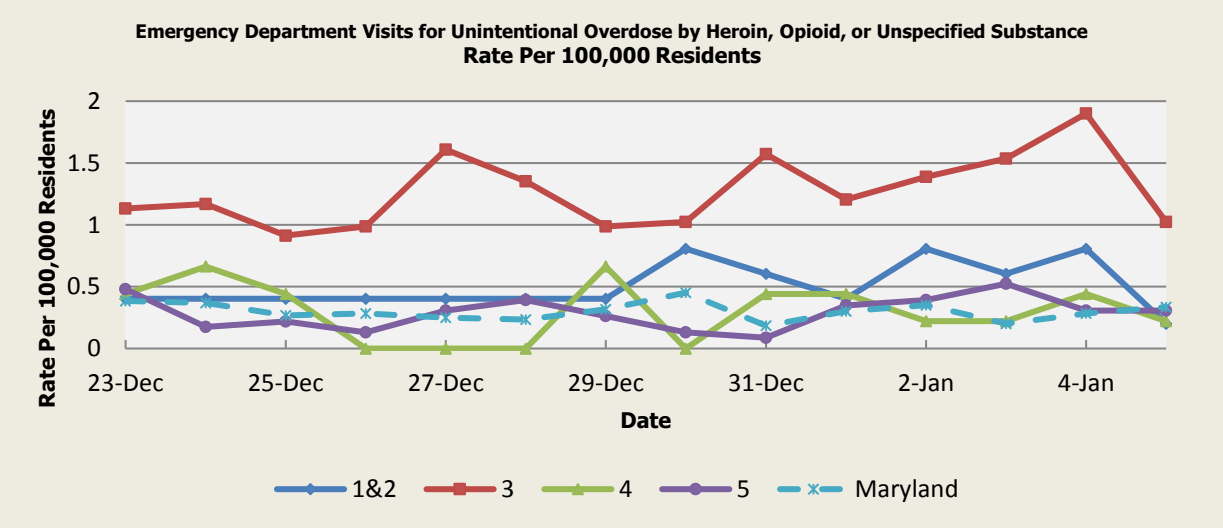
SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

Unintentional Overdose by Heroin, Opioid, or Unspecified Substance



Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

	Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.28	0.36	0.32	0.13	0.26
Median Rate*	1.01	1.32	1.10	0.48	0.99

** Per 100,000 Residents*

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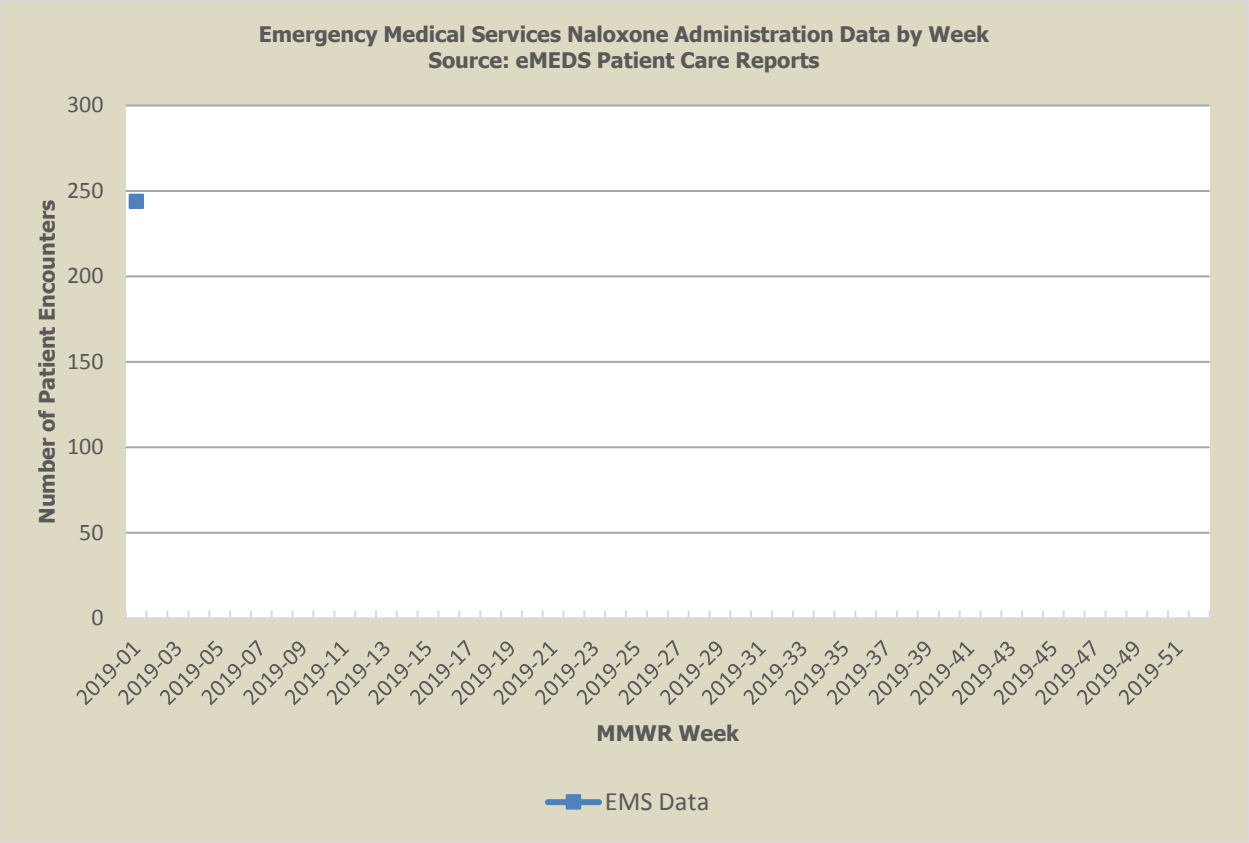
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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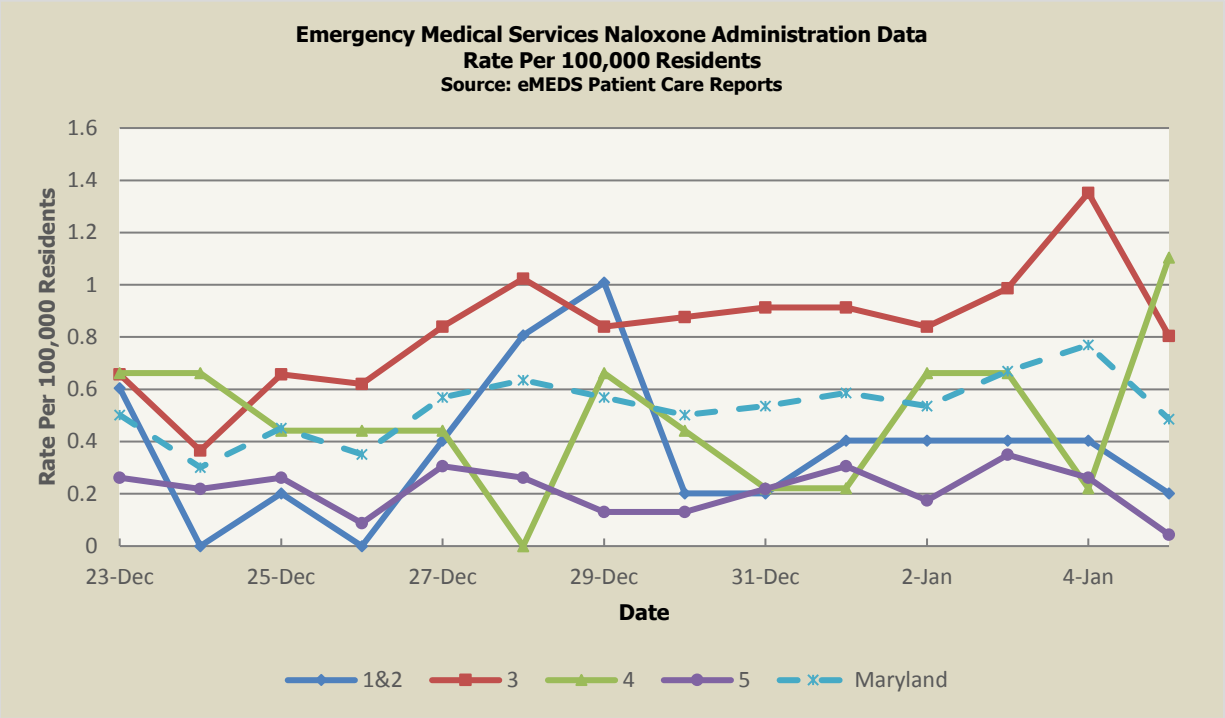
Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

	EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.28	0.36	0.32	0.13	0.26
Median Rate*	1.01	1.32	1.10	0.48	0.99

** Per 100,000 Residents*

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 10, 2018, the WHO-confirmed global total (2003-2018) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

AVIAN INFLUENZA, HUMAN (NEPAL), 08 Jan 2019, a 45-year old female (pregnant woman) and her two family members, residents of Dandapauwa-6, Ramkot, Kathmandu [Province Three] visited the OPD [outpatient department] of Sukraraj Tropical and Infectious Disease hospital, with a 4-day history of fever, cough, sore throat, chest pain, and weakness. According to them, they have a poultry chicken farm, where nearly 700 chickens have died in the last one-week alone and are still dying (dying in a rate of approx 150/day). According to them, chickens are showing symptoms of coughing, sneezing, nasal discharge, and dying quickly. Read More: http://www.promedmail.org/post/6245559

NATIONAL DISEASE REPORTS

RICIN (WASHINGTON), 05 Jan 2019, The Thurston County Sheriff's Office said a patient admitted to taking the poison ricin inside Providence St. Peter Hospital [Olympia, WA] Wednesday [2 Jan 2019] evening, potentially putting dozens of people at risk. "This is a public safety concern. When you go to the [emergency room] you might expect to catch the flu, you

don't expect to be exposed to ricin," said a man who was inside the hospital at the time of the incident. The man asked to keep his name private because he's worried about his family member, who's still hospitalized."[Hospital workers] said there was potentially an exposure in the [emergency room] to ricin," he said. Read More: http://www.promedmail.org/post/6242133

INTERNATIONAL DISEASE REPORTS

KYASANUR FOREST DISEAS (INDIA), 09 Jan 2019, Another 2 people died because of monkey fever [Kyasanur Forest disease] in Sagar district. In addition, the deaths of monkeys are continuing at several places in the taluk of Sagar in the district. [A 56-year-old] resident of Kanchikai village of Barangi Hobali under the limits of Aralagodu gram panchayat, who had lost her son 4 days ago due to monkey fever, died on the night of 4 Jan 2019. In addition [a 17-year-old] resident of Jeegala died on 5 Jan 2019. Read More:
http://www.promedmail.org/post/6248144

HANTAVIRUS (CHILE), 08 Jan 2019, The Seremi de Salud [Regional Health Ministerial Secretariat] of Los Lagos has confirmed this year's [2019] 1st case of infection by hantavirus in the Chilean region. The patient, a female employee of the Health Service of Chile, was taken to Santiago after it was confirmed that she had been infected with the virus in Epuyén, Argentina, which is located 4 hours from Palena. The woman resides in the city of Palena, in the Los Lagos Region, and remains hospitalized in the Puerto Montt Hospital since 5 Jan 2019. Read More:
http://www.promedmail.org/post/6248358

LASSA FEVER (TOGO), 08 Jan 2019, The Togo government confirmed last week [week of 1 Jan 2019] a Lassa fever case reported in Doufelgou district [Kara region] in the north of the country, according to a Agence de Presse Africaine report (computer translated). This was a hemorrhagic fever case according to officials. Read More:
http://www.promedmail.org/post/6248252

CRIMEAN-CONGO HEMORRHAGIC FEVER (UGANDA), 06 Jan 2019, Medical officials have confirmed an outbreak of Crimean-Congo fever in Masindi District in Western Uganda. The disease has been confirmed in Kikingura village in Bwijanga Sub County. "There is a health worker who died at the end of December 2018, and the blood sample tested positive for the haemorrhagic fever," said Mr Emmanuel Ainebyoona, the senior public relations officer at the Ministry of Health. He said the deceased was given a supervised burial by medical officers to ensure that mourners are not exposed to any possible infection. Read More:
http://www.promedmail.org/post/6244399

KYASANUR FOREST DISEASE (INDIA), 06 Jan 2019, An outbreak of Kyasanur Forest disease [KFD], also known as monkey fever, has been reported in some villages of Shivamogga district, following which authorities have taken measures, including vaccination, to combat it, a health official said on 3 Jan 2019. A team of doctors and paramedics was deputed to the affected areas, and a door-to-door verification was on to identify people affected by KFD, Shivamogga District Surveillance Officer (DSO) Dr B S Shankarappa said. Read More:
http://www.promedmail.org/post/6244398

ANTHRAX (ZIMBABWE), 06 Jan 2019, At least eight people are reportedly receiving treatment after consuming meat infected with anthrax in Zvimba. Sources privy to the development alleged that the disease has affected several cattle in the area, which is home to the former president Robert Mugabe. The affected people are from Kasanze and Chirau villages under Chief Chirau. Read More: http://www.promedmail.org/post/6244044

UNDIAGNOSED HEMORRHAGIC FEVER (SWEDEN), 05 Jan 2019, Medical tests have cleared a man initially suspected of being infected with Ebola in Sweden. The man, who had recently traveled to Central Africa, made global headlines on 4 Jan 2019, and sent Swedish authorities into high alert after arriving at a local emergency department that morning with symptoms of viral hemorrhagic fever, including vomiting blood. Read More: http://www.promedmail.org/post/6241880

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County